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(74) Agents: WEST-WALKER, Gregory, J., et al.; A J Park, 6th Floor Huddart Parker Building, Post Office Square, PO Box 949, 6015 Wellington (NZ). (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

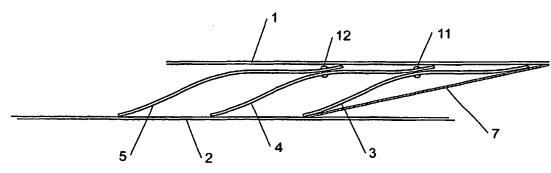
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ENERGY ABSORBING GARMENT



(57) Abstract: The invention comprises an energy absorbing and/or spreading garment for protection against an impact or a fall, the garment including an inner layer (2), an outer layer (1), a plurality of arcuate panels (3,4,5) housed between the inner layer (2) and the outer layer (1) of the garment, and wherein each panel (3,4,5) is arranged to overlap at least one adjacent panel in sliding relationship with the at least one adjacent panel. Impacts from falling off a horse or being kicked by a horse will cause the panels (3,4,5) to deform, spreading the energy of the impact. The panels (3,4,5) also slide against each other further spreading the force of the impact.

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International application No.

### PCT/NZ03/00150

Α.	CLASSIFICATION OF SUBJECT MA	ATTER							
Int. Cl. 7:	A41D 13/015								
According to International Patent Classification (IPC) or to both national classification and IPC									
B. FIELDS SEARCHED									
Minimum documentation searched (classification system followed by classification symbols)									
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched									
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI and keywords: energy and absorb and garment and panel and similar terms									
C.	DOCUMENTS CONSIDERED TO BE RE	LEVAN	T						
Category*	Citation of document, with indication, where appropriate, of the relevant passages								
.,,	US 4004493 A (COSTANZA) 25 J	14680							
X	Column 1 line 52 to column 2 line 4	1,4-6,8,9, 12,15-22							
x	GB 2368775 A (TURNER) 15 May Page 8 lines 8 to 27	1,15-24							
FR 2706318 A1 (PASCOLINI) 23 December 1994 Whole document									
X F	urther documents are listed in the con	ntinuatio	on of Box C X See patent family ann	nex					
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "T" later document published after the international filing date or priority of and not in conflict with the application but cited to understand the print or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step									
"L" docume claim(s) publicat	when the document is taken alone document of particular relevance; the claimed invention considered to involve an inventive step when the document one or more other such documents, such combinat a person chilled in the out.	nent is combined							
reason (as specified)  "O" document referring to an oral disclosure, use,  "A" document member of the same patent family  exhibition or other means  "P" document published prior to the international filing									
date but	later than the priority date claimed								
	al completion of the international search	Date of mailing of the international search report	9 SEP 2003						
15 September 2003  Name and mailing address of the ISA/AU  Authorized officer									
AUSTRALIAN PO BOX 200, \	PATENT OFFICE  WODEN ACT 2606, AUSTRALIA  pct@ipaustralia.gov.au	DAVID MELHUISH Telephone No: (02) 6283 2426							

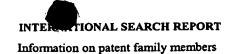


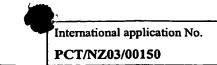


International application No.

## PCT/NZ03/00150

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT							
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.					
	US 5140995 A (UHL) 25 August 1992						
<b>A</b> ·	Whole document						
	US 5515541 A (SACKS et al.) 14 May 1996						
Α	Whole document	÷					
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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

	nt Document Cited in Search Report	Patent Family Member						
US	4004493	NONE						
GB	2368775	NONE						
FR	2706318	NONE						
US	5140995	NONE		•				
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